

Claims

1. Method for gluing of fibers and chips, in particular of wood fibers and wood chips, wherein the glue is atomized and the atomized glue is subsequently applied to the fibers or chips.  
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2. Method according to claim 1, wherein the glue is atomized by means of high-pressure air, wherein in particular a pressure range of between 15 to 250 bar, preferably a pressure range of 40 to 90 bar is provided.  
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3. Method according to one of the preceding claims, wherein a high-pressure pump whose revolutions per minute can preferably be adjusted is used for atomizing the glue.  
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4. Method according to one of the preceding claims, wherein a glue-water-mixture is atomized in which the proportion of glue is 45 – 65 % by weight, particularly preferably 50 to 60 % by weight, wherein, in particular, a urea resin is entirely or predominantly used as the glue.  
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5. Method according to one of the preceding claims, wherein the fibers and/or chips provided with glue are pressed to form a board, in particular by means of a calender press, the amount of fibers and/or chips provided with glue preferably being selected such that the thickness of the board is not more than 10 mm.  
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6. Apparatus for executing the method according to one of the preceding claims, comprising a high-pressure-pump (51) for nebulizing glue, whose revolutions per minute can be adjusted.  
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7. Apparatus according to the preceding claim, comprising high-pressure nozzles (8, 58, 59) that are arranged in a semi-circle, for nebulizing glue and supplying nebulized glue into a mixer which is

provided for mixing nebulized glue and fibers or chips.

- 5           8. Apparatus according to one of the two preceding claims,  
          comprising a calender press for pressing the fibers and chips  
          provided with glue.
- 10           9. Apparatus according to one of the claims 6 to 8, comprising a flow  
          rate meter (55) for measuring and/or controlling the transported  
          glue.
10. Apparatus according to one of the claims 6 to 9, comprising  
          a supply pipe (60) for compressed air to the high-pressure nozzles  
          (8, 58, 59).
- 15           11. Apparatus according to one of the claims 6 to 10,  
          comprising a supply pipe (65) for supplying warm water into the  
          glue supply.
- 20           12. Apparatus according to one of the claims 6 to 11,  
          comprising a line 56 which serves the purpose of supplying glue to  
          the high-pressure nozzles (8, 58, 59), parallel to the flow rate meter  
          (55).
- 25           13. Apparatus according to one of the claims 6 to 12,  
          comprising stop valves for controlling and/or dosing the supply of  
          glue, warm water and/or compressed air.
- 30           14. Apparatus according to one of the claims 6 to 13,  
          comprising a device for closing the high-pressure nozzles (8, 58,  
          59).
15. Apparatus according to one of the claims 6 to 14, wherein  
          the lines and valves that serve the purpose of supplying glue to the

high-pressure nozzles are designed such that they are able to resist a pressure of up to 100 bar, preferably a pressure of up to 250 bar.